USDA

United States Department of Agriculture

Soil Science Division

Natural Resources Conservation Service

STATE OF THE REGION

Luis A. Hernandez, Soil Survey Region 12

Natural Resources Conservation Service

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FY17 Activities

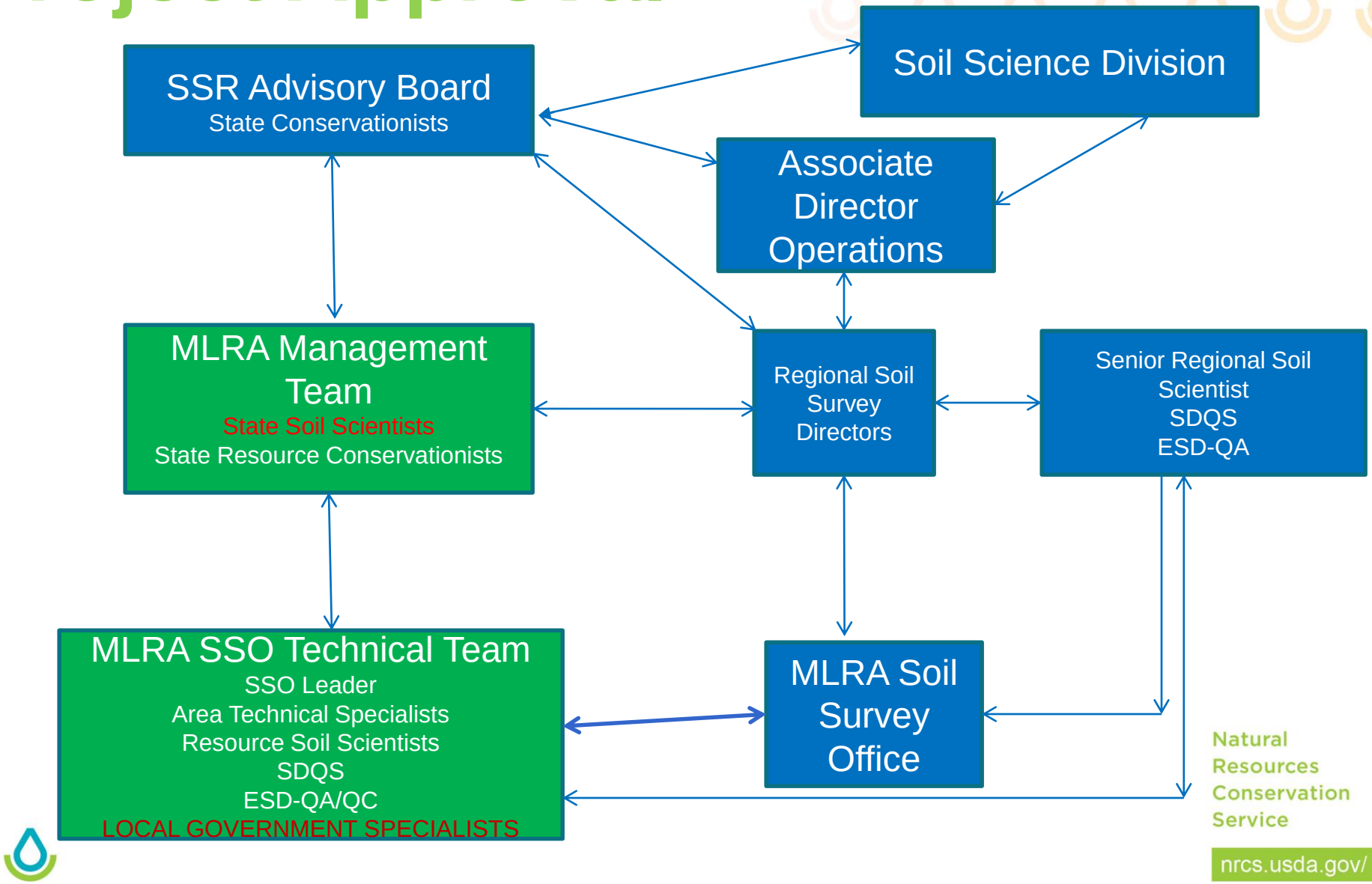
✓ Soil Resource Inventory

- Initial
- MLRA Update
- MLRA Assessment & Correlation

✓ Ecological Site Inventory

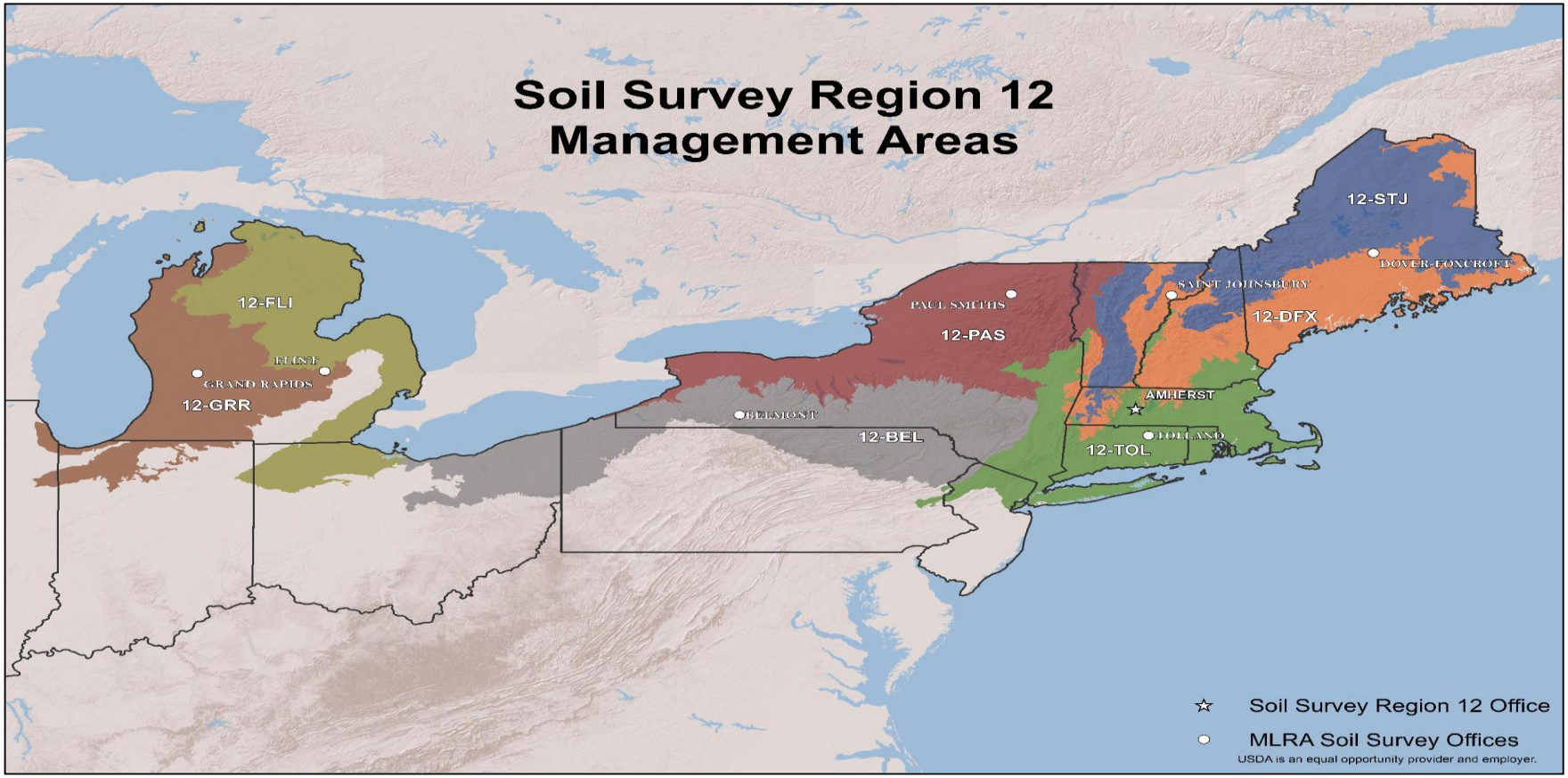
- Provisional Ecological Site Development Initiative

Project Approval



SUMMARY OF FY17 APPROVED PROJECTS

Project Kind	Number of Projects	States Affected	MLRAs Affected	NRCS Landscape Initiatives Affected	Project Concern
MLRA Assessment and Correlation	350	CT, IL, IN, MA, ME, MI, NH, NJ, NY, RI, VT	94, 97, 98, 99, 101, 140, 141, 142, 143, 144A, 144B, 145, 149B	• Bog Turtle • Golden Winged Warbler • Great Lakes Restoration • Mississippi River Basin Healthy Watershed • New England Cottontail	Soil Condition Fish and/or Wildlife
MLRA Update	58	CT, MA, ME, MI, NJ, NY, PA, RI, VT	98, 99, 127, 140, 142, 141, 144A, 144B, 143, 145, 149B	• Golden Winged Warbler • Great Lakes Restoration • New England Cottontail	Fish and/or Wildlife Land Use Soil Condition Water Quality
Initial	2	MI, NH, ME	99, 143	• Great Lakes Restoration	Land Use Soil Condition Water Quantity
Provisional Ecological Sites	TBD	CT, MA, ME, MI, NH, NY, VT	94A, 94C, 96, 142, 143	• Golden Winged Warbler • New England Cottontail • Bog Turtle • Great Lakes Restoration	Land Use Plant Condition Soil Condition Fish and/or Wildlife



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DETROIT SOIL SURVEY

- ✓ NCSS partnership among Wayne County SWCD, Detroit City & 23 municipalities, and Wayne State University
- ✓ MOU signed in 2011, field work started in 2012, Detroit soil survey information available on Web Soil Survey in February 2017

DETROIT SOIL SURVEY (Cont.)

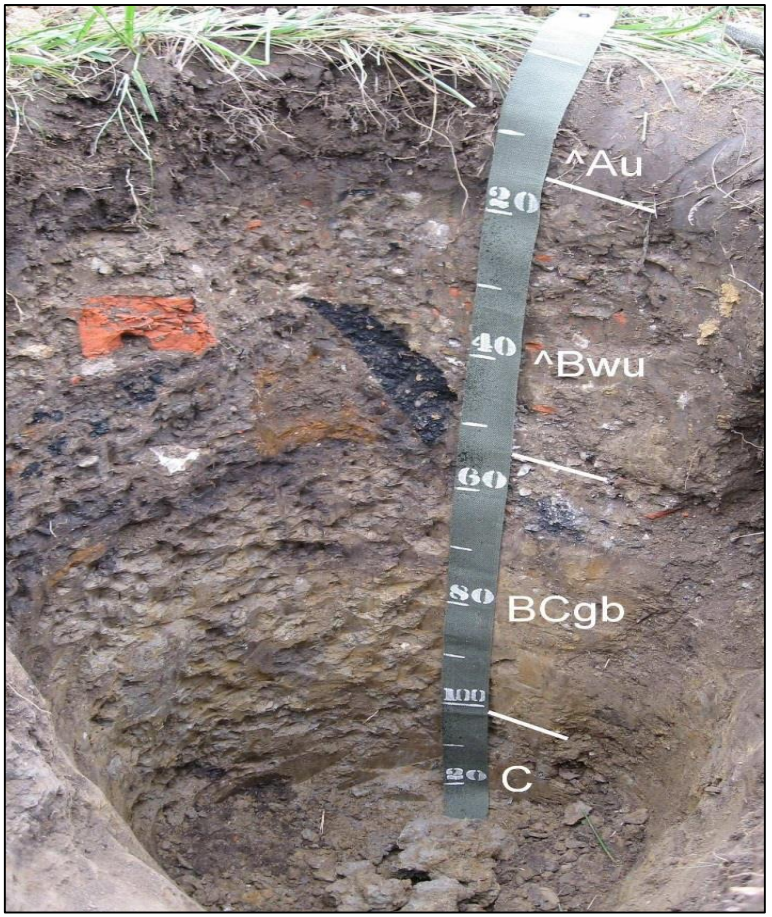
Findings in residential areas:

- ✓ **Fill averaged 13 in thick**
- ✓ **pH of fill averaged 7.6 to 7.9**
- ✓ **Content of Artifacts averaged 2 percent**

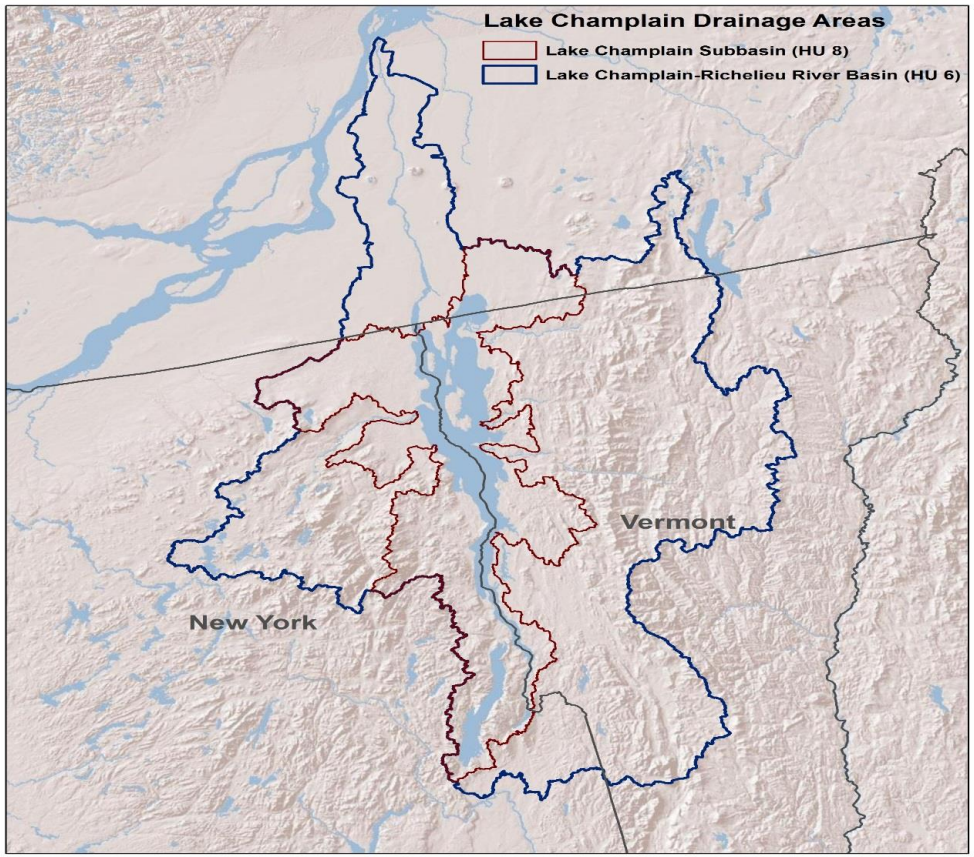
DETROIT SOIL SURVEY (Cont.)

Findings in <u>commercial/industrial</u> areas:

- ✓ **Fill averaged 37 in. thick**
- ✓ **pH of fill averaged 7.8 to 8.2**
- ✓ **Content of Artifacts averaged 29 percent**



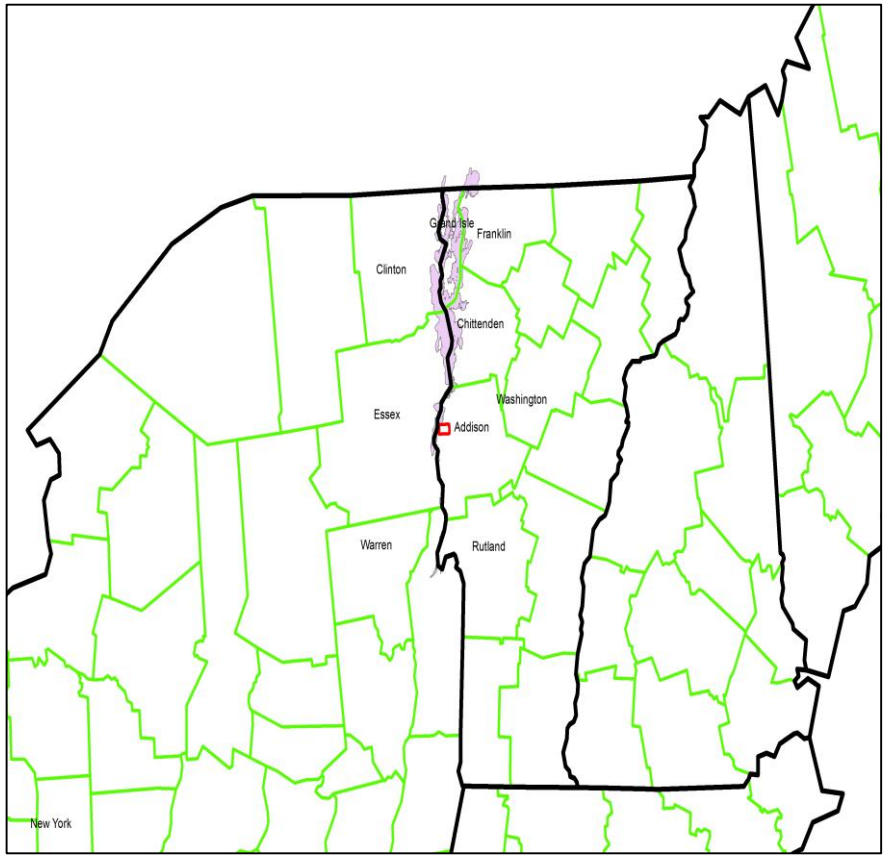
Lake Champlain MLRA Soil Survey Update



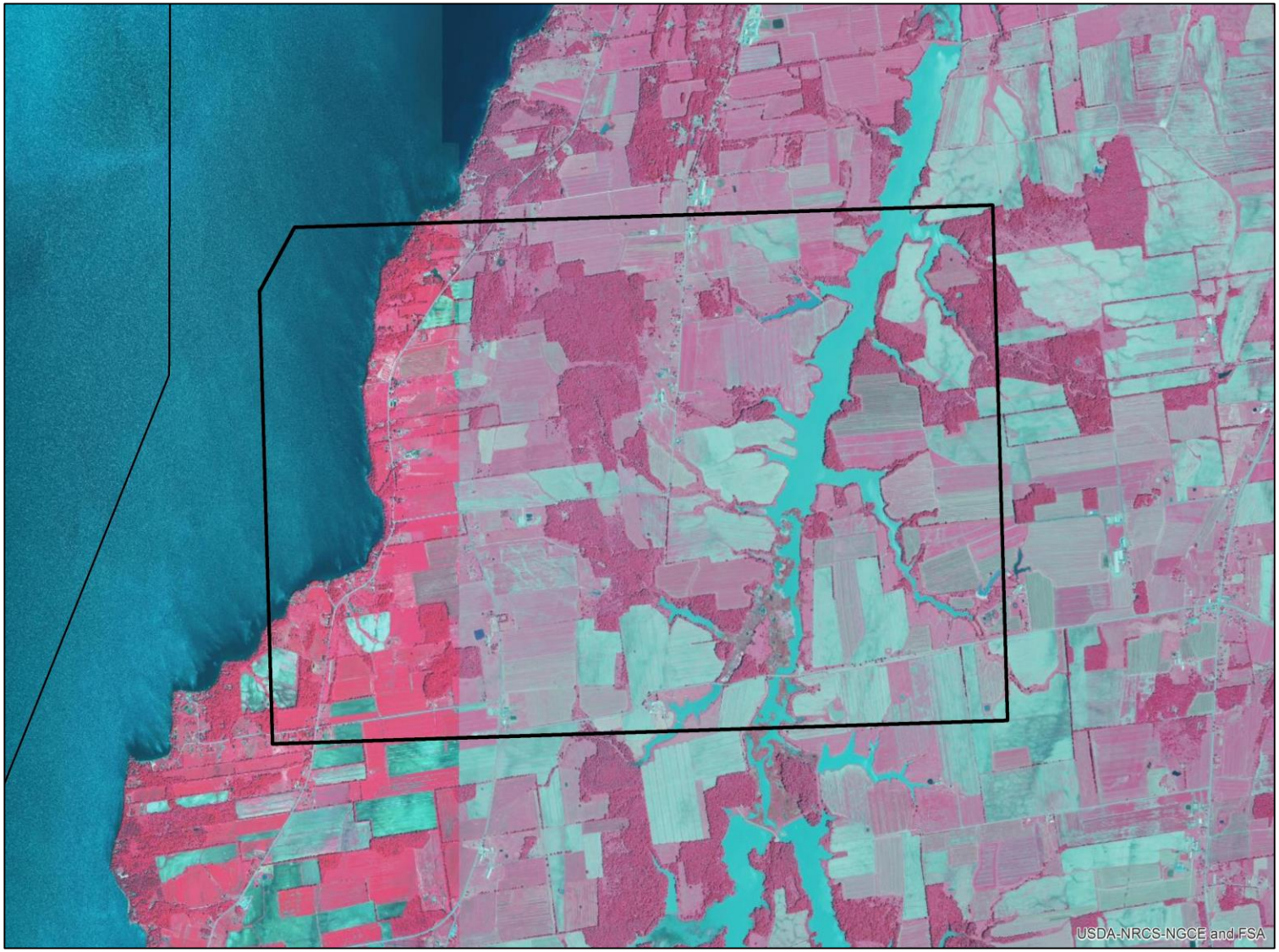
The main goal of this project update is to complete MLRA Soil Survey Update of Lake Champlain Valley in NY and VT.

Lake Champlain MLRA Soil Survey Update (Cont.)

- ✓Digital Soil Mapping Techniques
- ✓Soil Inference Engine (SIE)
- ✓Raster Product
- ✓Vector Product

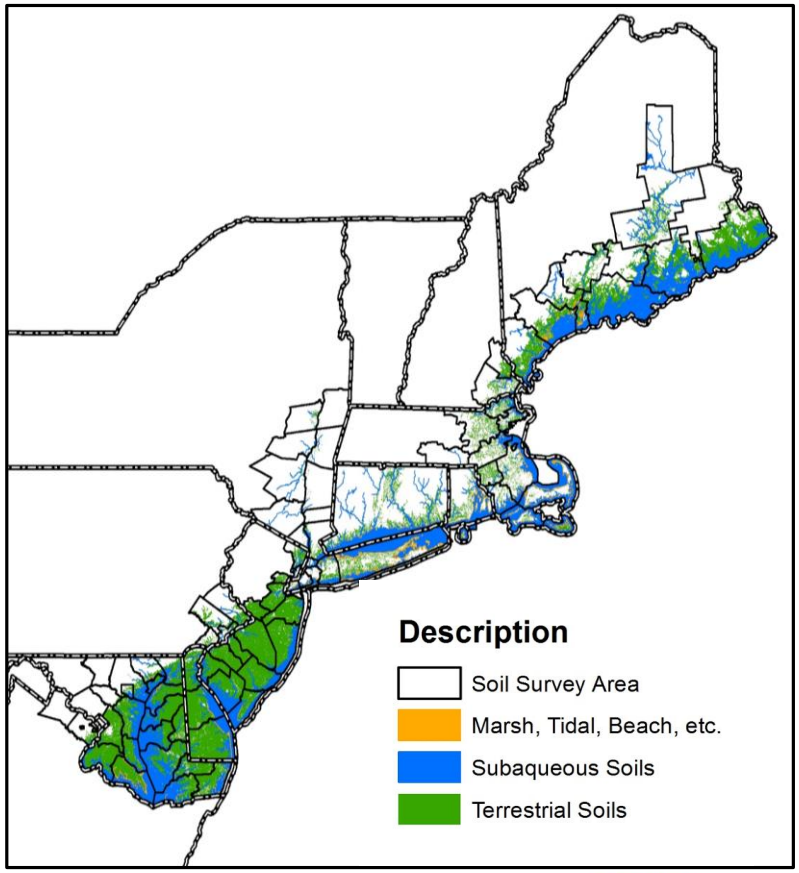


Lake Champlain MLRA Soil Survey Update (Cont.)



COASTAL ZONE SOIL SURVEY

- ✓ **NRCS Programs Implementation –** For example, EWP Coastal Flood Plain Easements $5 Million plus on approximately 90 parcels in CT alone, require updated soils information
- ✓ **Coastal Wetland Restoration Efforts**, require updated soils information
- ✓ **Building New Partnerships —** Expanding the customer base for Soil Survey
- ✓ **21st Century Soil Survey —** Making Soil Survey Relevant in the Future, New Issues and Interpretations



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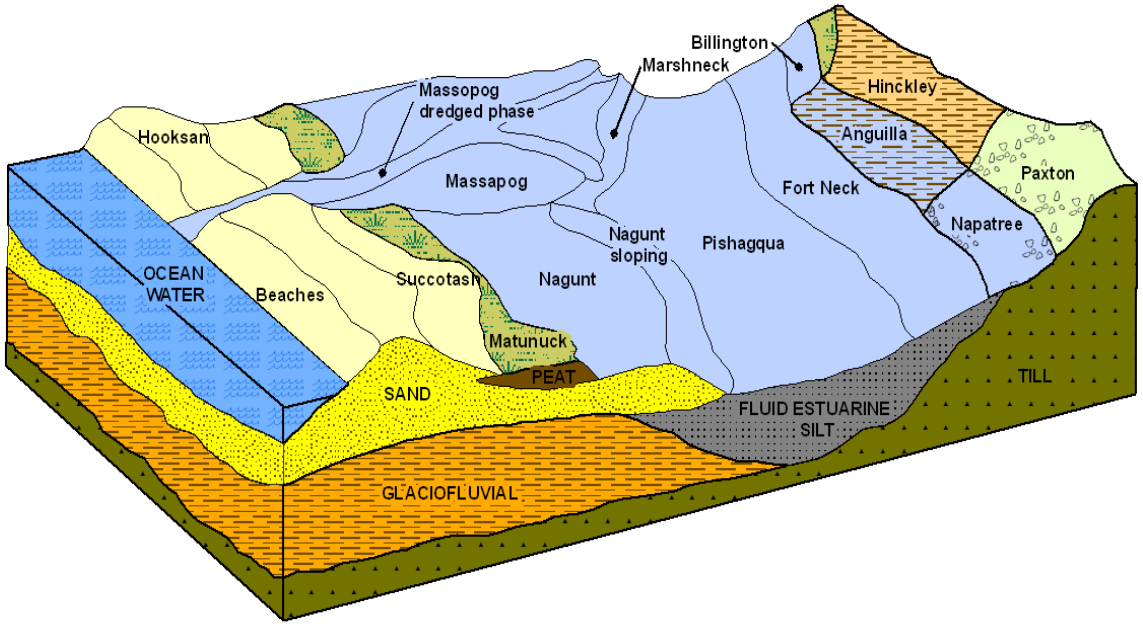
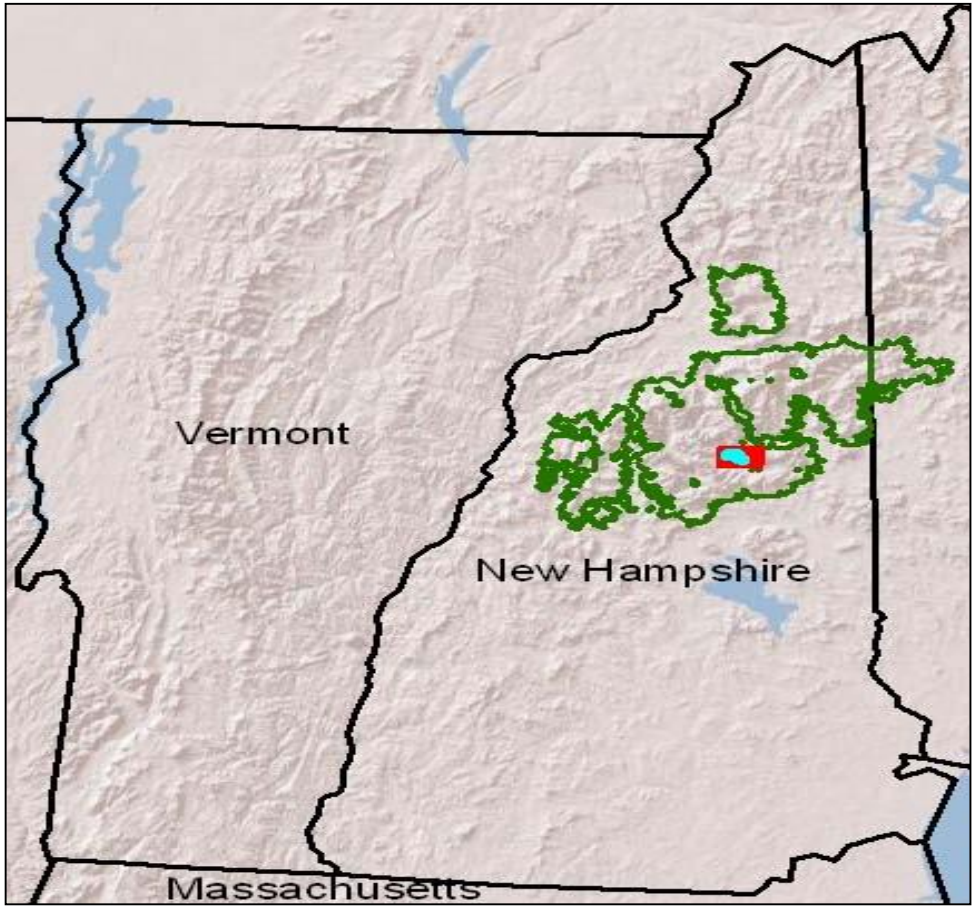
COASTAL ZONE SOIL SURVEY (Cont.)

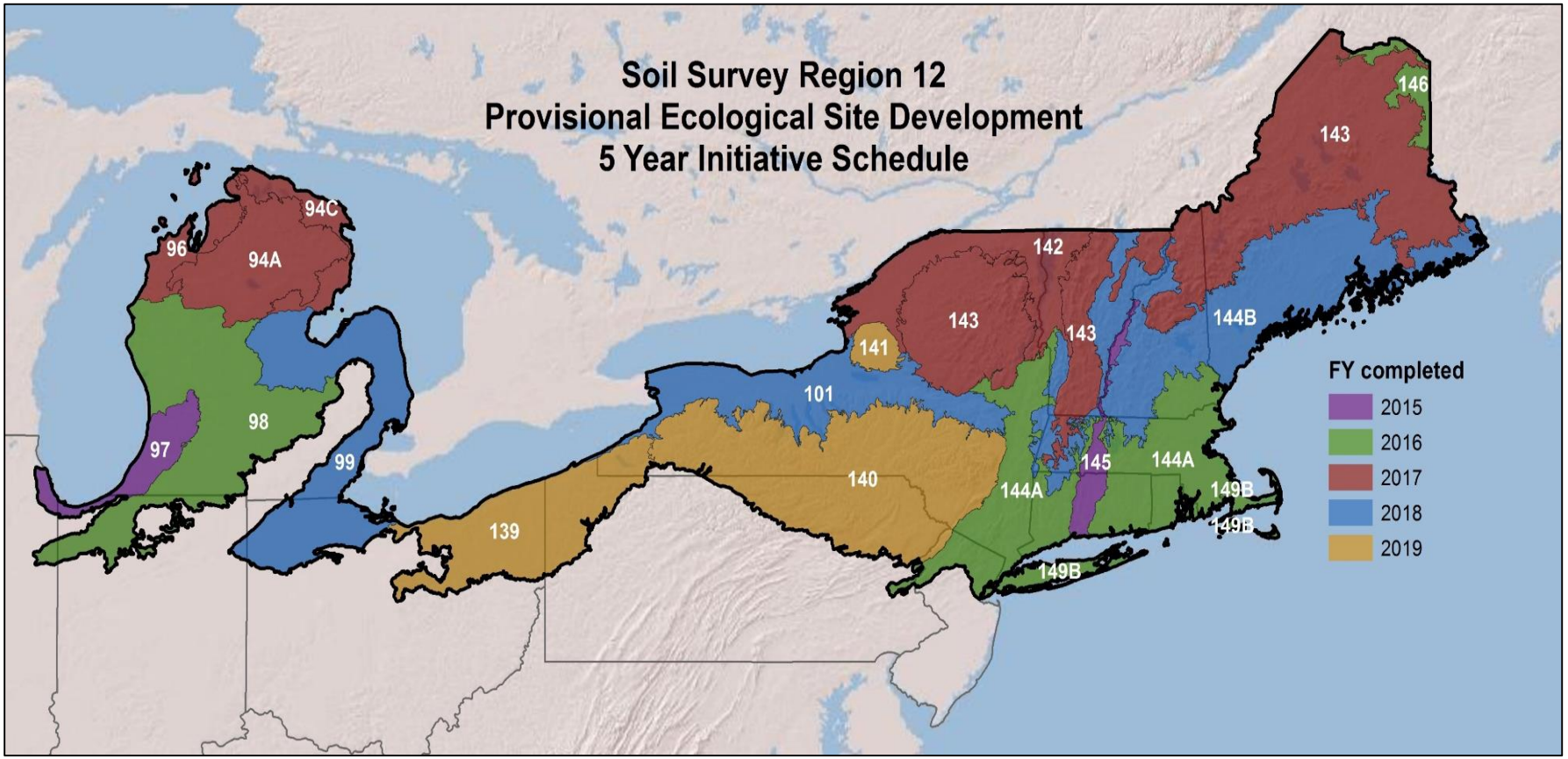


USFS WMNF



The main goal of this project is to complete initial soil survey of USFS White Mountain National Forest.

ECOLOGICAL SITE INVENTORY



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Other Activities:

- **Technical Soil Services**
  - ✓ **NRCS programs support, etc.**
- **National Ecological Observatory Network (NEON)**
  - ✓ **Soil sampling, description & Laboratory Analysis**
- **University of Vermont**
  - ✓ **Determination of K factor in selected soils of Lake Champlain Basin**
- **Brooklyn College**
  - ✓ **New York City Soil Systems**
- **Ag. Handbook 296 Update**
  - ✓ **MLRA Line Adjustments**

More Information:


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Soil Survey Region 12
Newsletter
January 2017

Inscrutable Graminoids
by Nels Barrett, NRCS Regional Ecological Site Specialist–Amherst, Massachusetts

Sedges have edges
rushes are round,
and grasses are hollow
with nodes from tip to the ground.

Two NRCS ecologists, Nels Barrett and Michael Margo, were among 15 participants joined from different government agencies, non-government organizations, consultants, and others that attended, "Inscrutable Graminoids: Field Identification of Late-season Coastal & Tidal Grass-like Plants," an Aton Forest workshop. William "Bill" Moorhead, instructor and contracting botanist, led the workshop on September 27, 2016, at the Saybrook Point Pavilion in Old Saybrook, Conn.

This plant identification workshop focused on the field identification and ecology of important grasses, rushes, and sedges, collectively referred to as "graminoids." As a group, true grasses and other grass-like plants are often very challenging to identify in the field. After introductions, overview, and a few anecdotes, the class headed immediately to the field. The first site visited was Fenwick Meadow, an ecologically important site supporting a rich and diverse meadow flora dominated by graminoids. With the aid of the instructor, many species of *Panicum* grasses and closely related *Dichanthelium* grasses put everyone's field ID skills to the test. The second site visited was Ragged Rock Creek, a brackish tidal marsh and meadow complex. Among the many graminoids encountered, two noteworthy plant identifications were, the New England Bulrush (*Bolboschoenus novae-angliae*) and American common reed (*Phragmites australis* ssp. *americanus*), both plants with a conservation status as species of special concern. As it turned out—with a good identification key, a 10X hand lens, and a lot of patience—many of the graminoids were not as inscrutable as originally thought.

Top left photo: NRCS ecologist, Michael Margo, takes a break from identifying plants to smile for the camera at the Aton Forest workshop.

Top center photo: NRCS soil scientist, Martha Stuart, records sample data for a national project.
Read more on page...3

Top right photo: NRCS booth set up for Paul Smith's College 32nd Annual Spring Career Fair.
Read more on page...3

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Region 12 Home Page:

- ✓State of Region Report
- ✓Accomplishments Report
- ✓Newsletter
- ✓Contact Information

https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/survey/office/ssr12/

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Thank You!!

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